15.063 Communicating with Data - Summer '03

Kendall Crab and Lobster Case: Clarifying Notes and Additional Instructions

In addition to the instructions at the end of the case, you should take into consideration the following clarifying notes and instructions in preparing your case:

1. Assume the date and time stamp for your decision tree is shortly before noontime (i.e., 12:00) of the day we discuss the case.
2. Assume the lobster packing operation starts at noontime at ends by 5:30 PM.
3. Canceling the orders is a viable option even before knowing with certainty whether or not Logan closes.
4. Assume the order size for the day is known with certainty at the time you draw the tree.
5. For uniformity, you can assume that order size for the day is 3000 lobsters but the analysis is actually independent of the order size for the day (why?).
6. Assume that at some point in time after 12:00 but before 5:30 PM you will know with certainty whether or not the storm hits Boston and whether or not Logan closes.
7. You can wait up until the last minute (i.e., 5:30 PM) to cancel the United Express (UE) truck pickup with no penalty.
8. Assume that any future orders resulting from coupon redemption will be shipped vie UE. In addition, you can ignore the time value of money.
9. Assume that the goodwill cost of canceling the orders and sending out coupons is zero (i.e., there will be no effect on future demand/selling prices). In addition, assume that coupon redemption will not cannibalize future demand (i.e. future demand increases by the number of coupons redeemed). A priori (i.e., before performing the analysis), is this a realistic assumption? A posteriori (i.e., after performing the analysis), is there any relevance to the assumption (i.e. consider whether, despite the assumption, your optimal decision is inline with a more realistic model (i.e., one which considers goodwill costs)?

10. Base the thrust of your analysis on the assumption that Jeff Daniels' strategy is to maximize expected net profit contribution but you should also consider the relevance of risk averse strategies (e.g. the relevance of a decision based on avoiding a "worst case" scenario).
11. Test how robust your optimal strategy is by performing sensitivity analysis on:
    - The probability that a storm hits Boston.
    - The probability that Logan closes given that a storm hits Boston.